II. REMARKS

1. Claims 1-15 remain in the application.

2. Applicants appreciate the indication that claims 4-8, 10, and 11 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. However, Applicants believe that these claims are patentable as they stand for the reasons stated below.

3. Applicants respectfully submit that claims 1-3, 9, and 12-15 are not anticipated by Choudhary (US 6,782,404) under 35 USC 102(e).

3.1 Choudhary fails to disclose or suggest determining a plurality of bit error rate values, each bit error rate value being associated with one of a plurality of successive timing points, as recited by claims 1, 13, 14, and 15.

The present invention describes measuring a plurality of bit error rate (BER) values for a plurality of successive timing points. In more detail, the present invention discloses sampling a data signal at a plurality timing points with respect to the eye center, comparing the sampled values with expected data and assigning a BER value for each of the timing points, as disclosed on page 2, line 21 through page 3, line 1.

Choudhary, on the other hand, discloses oversampling a data signal (i.e. sampling q times within one data interval) but does not determine BER values for each timing point. Instead, Choudhary describes phase sampling the oversampled signal,

determining difference vectors, weighting (or scaling) the vectors, summing the scaled difference vectors, and incrementing, decrementing, or leaving unchanged an output phase value depending on the result of the sum of the scaled difference vectors. The BER of the phase value may be monitored to improve jitter tolerance, but this is a BER of the output phase value and not a plurality of Ber values, each associated with one of a plurality of successive timing points.

3.2 Choudhary also fails to disclose or suggest applying a polynomial fit to said plurality of bit error rate values associated with said timing points for determining a number of polynomial coefficients of said polynomial fit, as recited by the independent claims.

There is no disclosure related to any polynomial fit to any function in Choudhary, especially not to a bit error rate function over a sampling time. Choudhary's difference vector, for example, as disclosed in column 3, line 50, or column 4, line 45, is not a polynominal function, but only a scalar value representing the sum of weighted values.

3.3 Most significantly, Choudhary fails to disclose or suggest deriving the amount each of said deterministic and said random jitter from the polynomial coefficients, as recited by the independent claims.

According to the present invention, jitter parameters are derived from the polynomial coefficients of the fitted function. Choudhary has no disclosure related to any determination of jitter parameters. Instead Choudhary discloses determining one bit error rate value for one output phase. If the bit error rate exceeds a predefined value, the number of difference

vectors is increased. (see column 4, lines 5-15). Thus, Choudhary discloses a control system for optimizing the jitter tolerance but has no disclosure related to deriving the amount each of the deterministic and random jitter from the polynomial coefficients.

At least for these reasons, Applicants submit that Choudhary fails to anticipate independent claims 1, 13, 14, and 15, and dependent claims 2-12.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

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